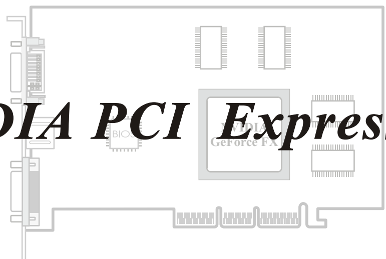
Cinematic Computing for Every User

NVIDIA PCI Express Series



User's Manual

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Driver Installation
Display Modes
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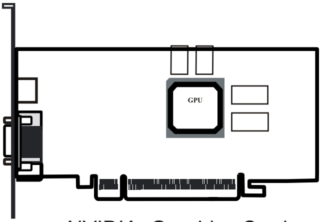
24 OpenGL Settings

NVIDIA PCI Express Series User's Manual
Version B
Sep 2004

P/N: W0500895

Getting Ready

Package Contents



NVIDIA Graphics Card



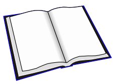
AV cable
(Optional for TV output)



S-video cable
(Optional for TV output)



Software CD

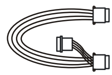


General Guide/ Quick Installation Guide

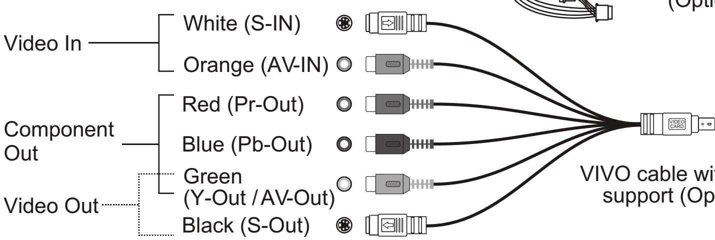
If the TV-OUT connector on your card looks like this:  , the following cable is included:



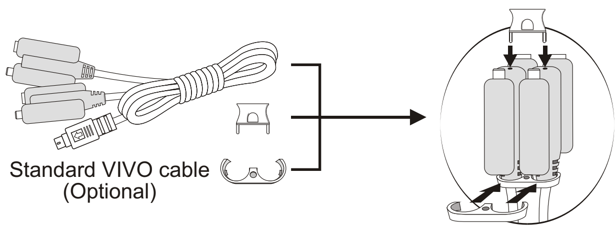
S-video-AV cable
(Optional)



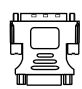
Power-split cable
(Optional)



VIVO cable with HDTV support (Optional)



Standard VIVO cable
(Optional)



DVI to VGA adapter
(Optional)

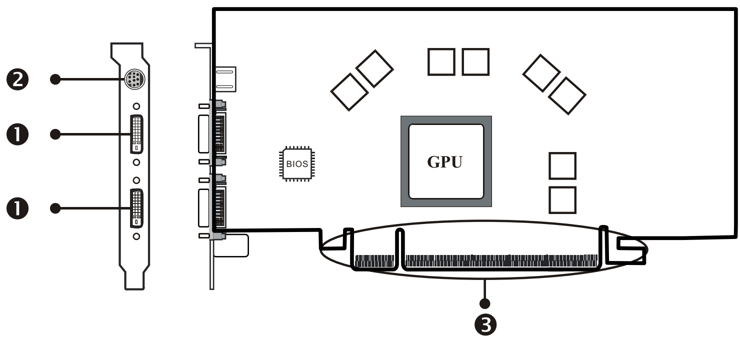
> ⚠ **Do not have the VIVO cable connected with the AV cable and S-video cable simultaneously. Connect only the cable for currently desired input source for the video to be displayed correctly.**

Getting Ready

Board Layout

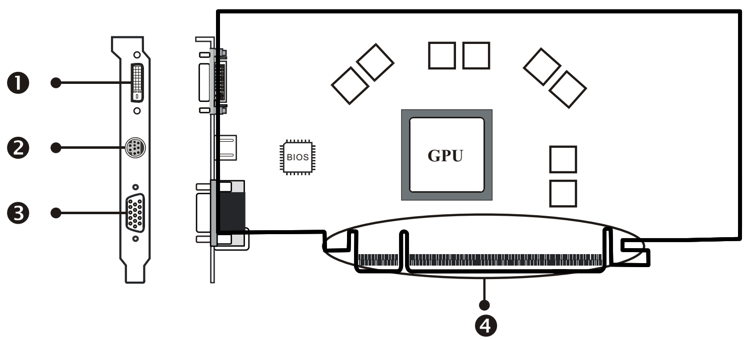
TYPE 1

❶ DVI Connector (Optional)
❷ VIVO / TV Out Connector (Optional)
❸ Bus Connector



TYPE 2

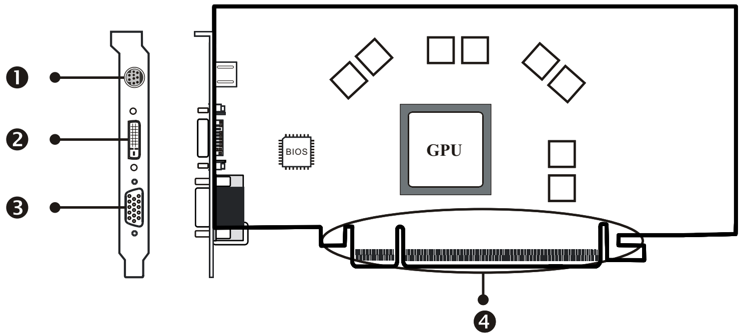
❶ DVI Connector (Optional)
❷ VIVO / TV Out Connector (Optional)
❸ VGA Connector
❹ Bus Connector



Note: The board layout is for your reference only. The graphics card you purchased may differ from the figures.

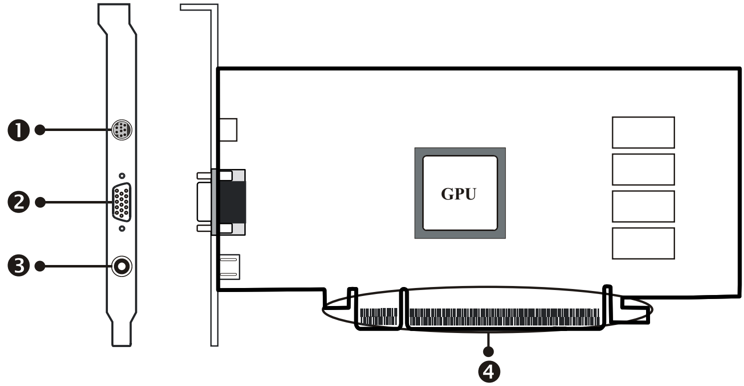
TYPE 3

❶ VIVO / TV Out Connector(Optional)
❷ DVI Connector (Optional)
❸ VGA Connector
❹ Bus Connector



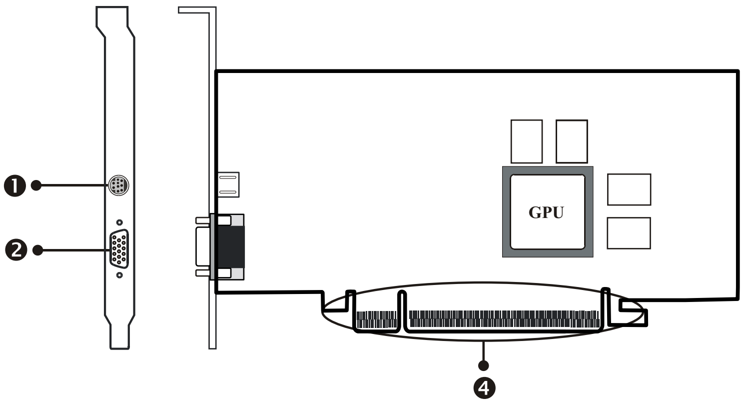
TYPE 4

❶ TV Out / S-video
❷ VGA Connector
❸ TV Out / Composite
❹ Bus Connector (AGP / PCI Express)



TYPE 5

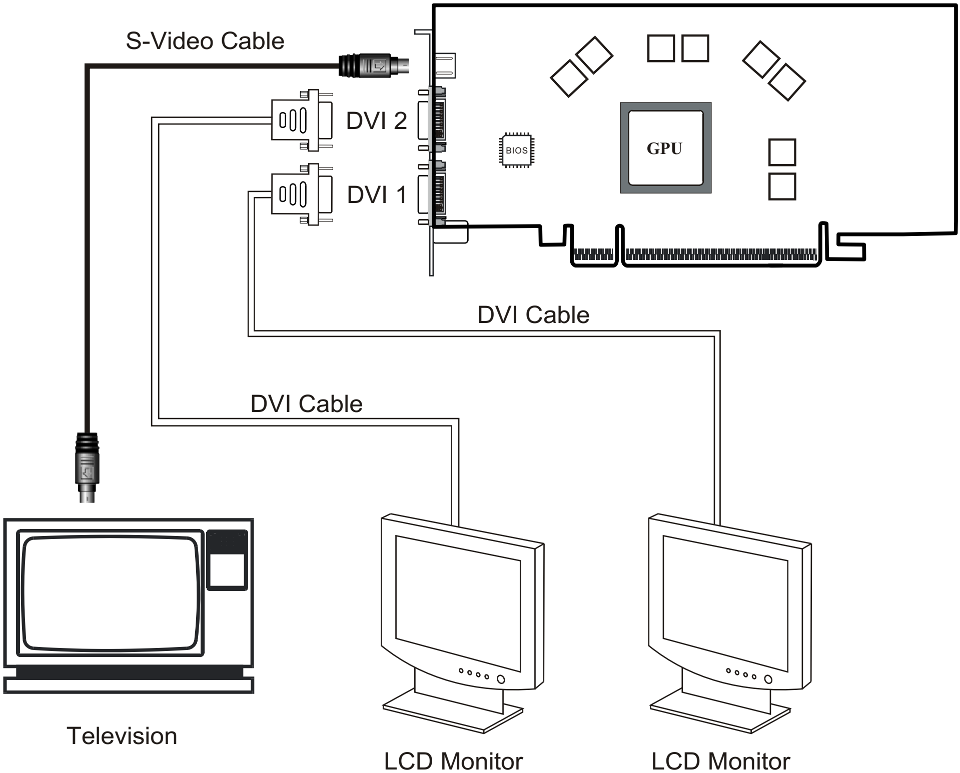
❶ TV Out
❷ VGA Connector
❹ Bus Connector (PCI Express)



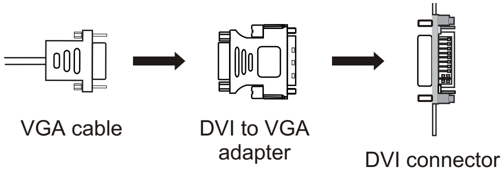
Features

- Powered by NVIDIA GeForce PCX / GeForce 6 GPU – Graphics Beyond Imagination
- CineFX Engine - Enables stunning, cinematic-quality special effects along with advanced programmability
- Intellisample Technology - Delivers higher image quality through anti-aliasing at frame rates that rival aliased modes
- nView Multi-display Technology - Empower user with maximum flexibility in display options and control
- PCI Express Support - PCI Express is a new Intel bus architecture that doubles the bandwidth of the AGP 8X bus, delivering over 4GB per second in both upstream and downstream data transfers.
- Microsoft® DirectX® 9.0 and OpenGL® 1.4 /1.5 Optimizations and Support
- Video-in / Video-out function support (Optional)

Connections Type 1

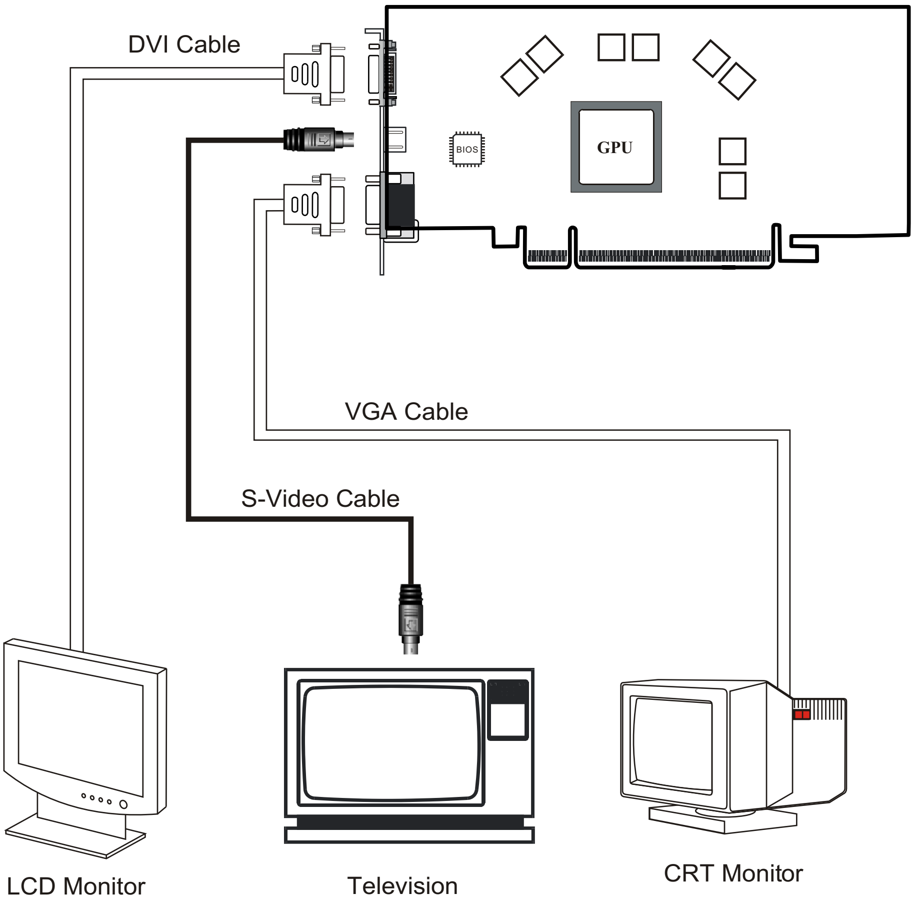


Connecting the VGA cable to the DVI connector through the DVI to VGA adapter:

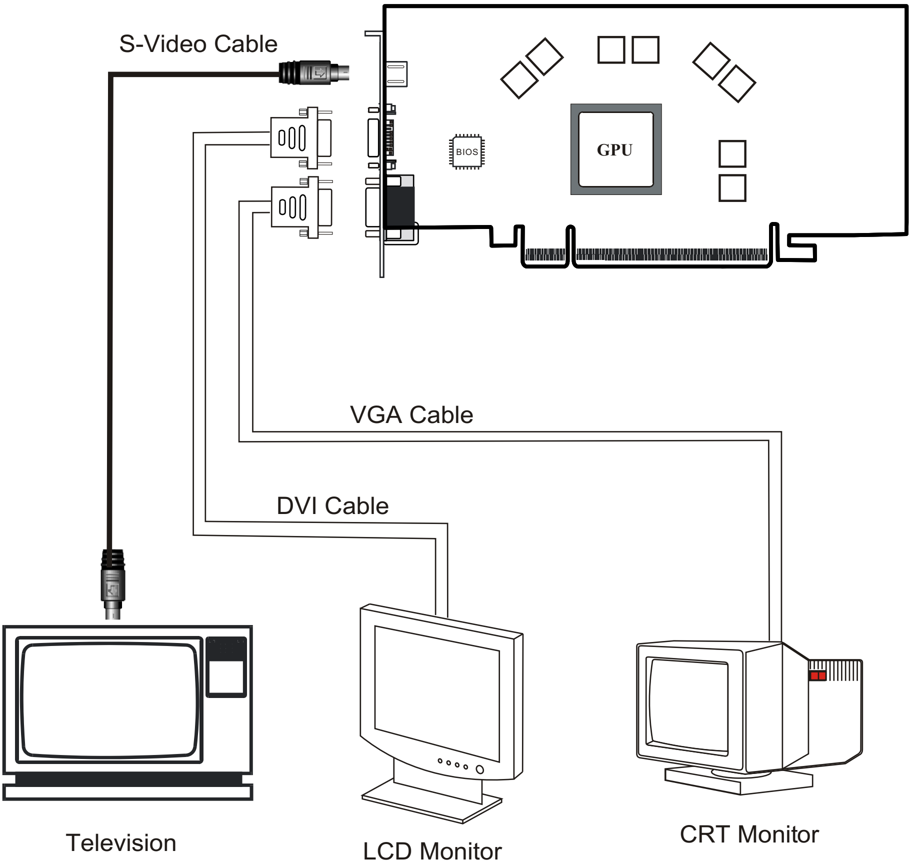


When the DVI to VGA adapter is used on DVI 2 to connect to a monitor, the TV-out will not function.

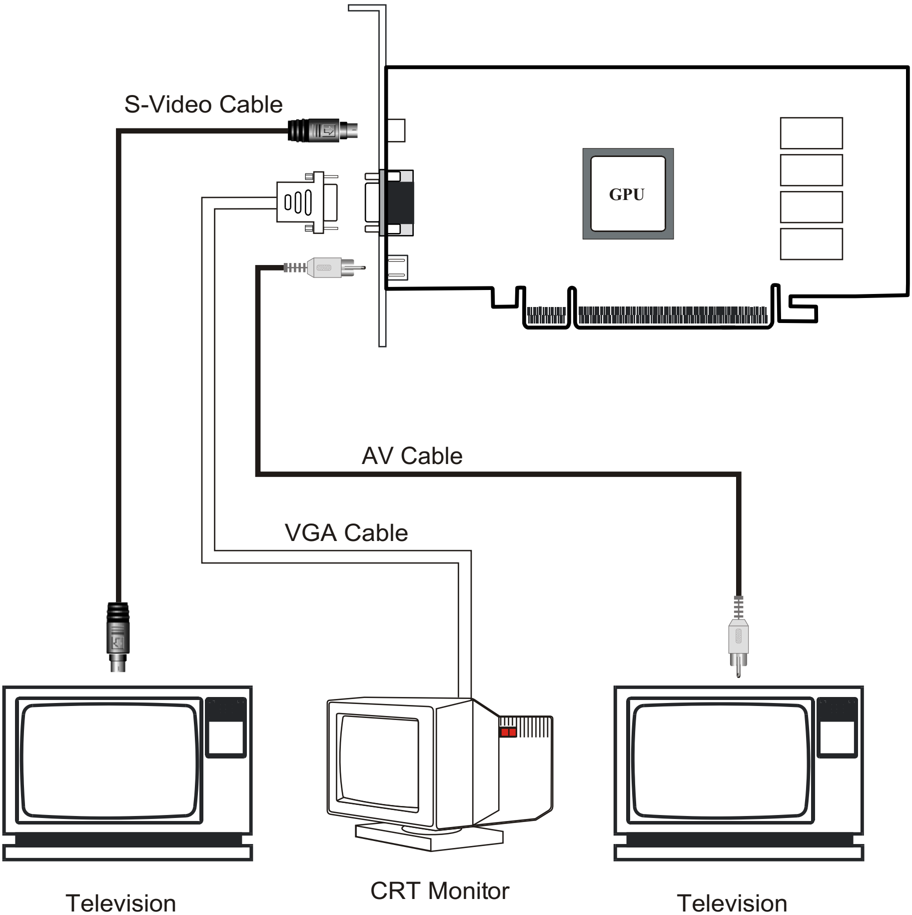
Connections Type 2



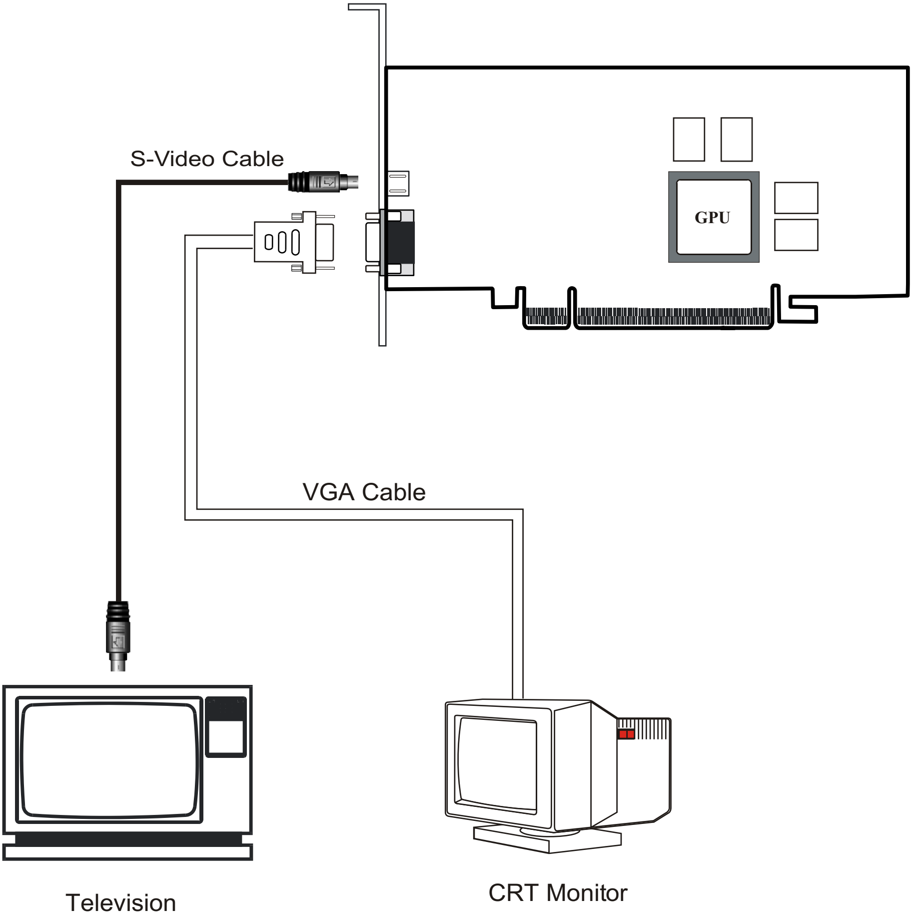
Connections Type 3



Connections Type 4



Connections Type 5



Before Driver Installation

Note: It is highly recommended that you follow the steps in this section to completely uninstall the NVIDIA Display Driver software before installing a new version of the software.

To uninstall the NVIDIA Display Driver software, follow these steps:

Step 1 From the Windows taskbar, click **Start** > **Settings** > **Control Panel** to open the Control Panel windows.

Step 2 Double click the **Add/Remove Programs** item.

Step 3 Click the **NVIDIA Windows Display Drivers** item from the list.

Step 4 Click **Change/Remove**.

Step 5 Click **Yes** to continue.

Step 6 Restart your system.

Quick Driver Installation

Windows XP/2000/ ME/98

WE HIGHLY RECOMMEND WINDOWS XP/2000/ME/98 USERS TO USE QUICK DRIVER INSTALLATION.

WINDOWS NT 4.0 USERS PLEASE INSTALL THE DRIVER MANUALLY.

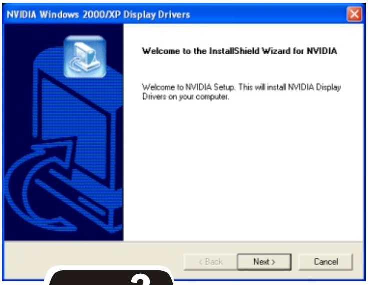


Step 1

Insert the software pack CD into the CD-ROM drive.

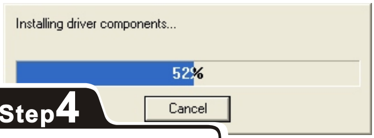
Step 2

The **Autorun** screen will display on the screen. Select ***Driver Install*** by clicking on it.



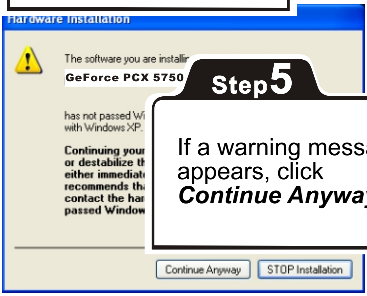
Step 3

A dialog box tells you it is ready to install the driver. Click ***Next***.



Step 4

Windows is installing the driver. A dialog box appears showing the progress.



Step 5

If a warning message appears, click ***Continue Anyway***.



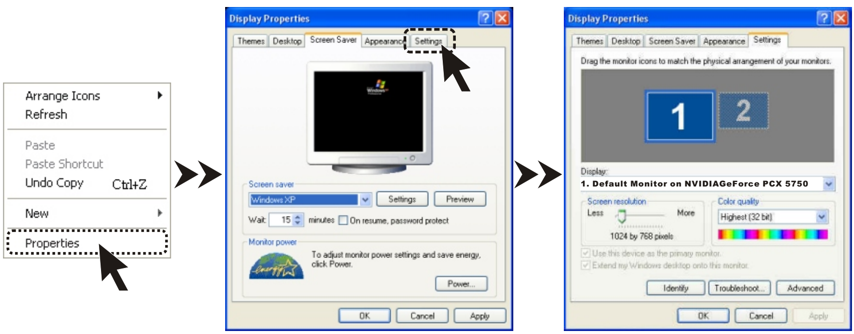
Step 6

When it is finished, a dialog box asks you if you want to restart your computer. Tick ***Yes*** and click ***Finish***.

Calling up the Display Properties Settings Panel

Display properties related to the graphics adapter are all under the *Settings* tab as shown in the figure below.

1. Right-click on the display desktop to open a pop-up menu.
2. Click the *Properties* option to call up the 5-tabbed Display Properties setup panel. It is under the *Themes* tab initially.
3. Click the *Settings* tab to switch to the *Settings* panel.



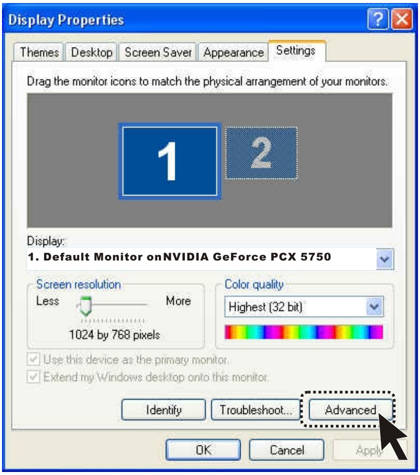
What Settings Panel Does

The *Settings* panel contains two major parts of settings:

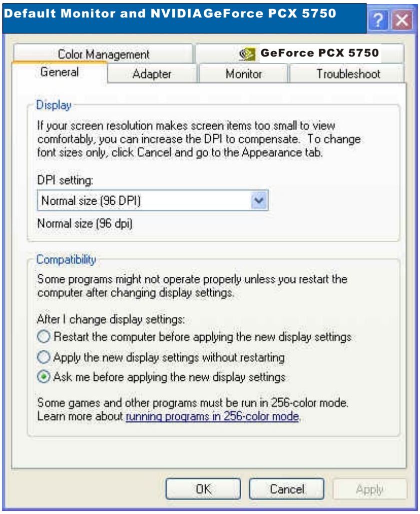
1 **Screen Settings,** including resolution and color depth settings, with a preview window.

2. **Advanced Settings,** accessed by clicking the *Advanced* button as shown in the figure below.

Settings Panel



Advanced Settings Panel



※ ***GeForce PCX 5750 is used as the example throughout the manual.***

Software Settings

Display Properties- Screen Settings

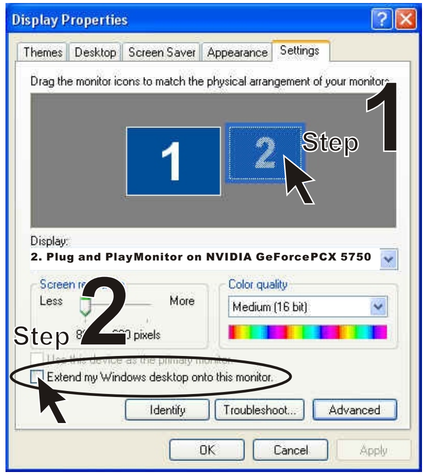
Resolution and color depth of your display can be set on the Settings panel (see Page 11). You can also extend your screen to the second device and set its resolution separatly using this panel.

To extend the desktop

You need to have two monitors connected to use this feature.

Call up the **Settings** panel as described in Page 11, the preview window shows you have two display devices connected to your computer, the one(s) in use is in solid blue and white, and the unused one is blurred. In the figure to the right, device 1 is in use, and device 2 is not.

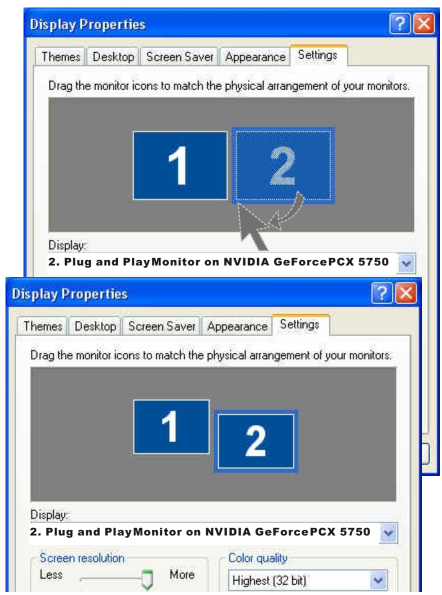
To extend your desktop to a second device, click the screen 2 Icon to highlight it (Step 1). Then check the check box on the bottom (Step 2). The result will be as in the second figure. Screen 1 is the primary screen; and 2, the extended screen.



Desktop Arrangement

You can move either screen icons freely and arrange them in any fashion (see the second figure from the top).

In addition, the resolution of either screen can be changed individually; simply click on one of the screens in the preview window and drag the resolution sliding knob to your desired resolution.



Identify button

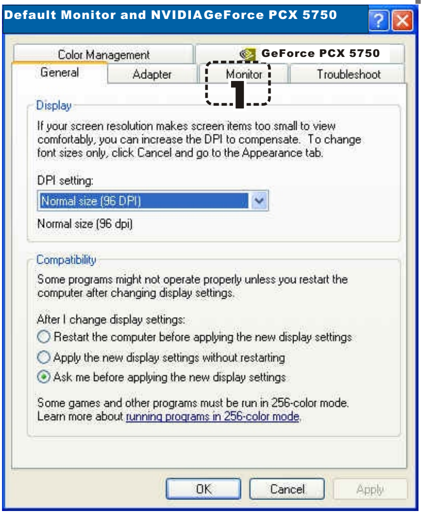
Click this button on the bottom of the **Settings** panel to display on your primary screen a big ***1a***, and the extended, **1b**, as in the figure below, for identification.



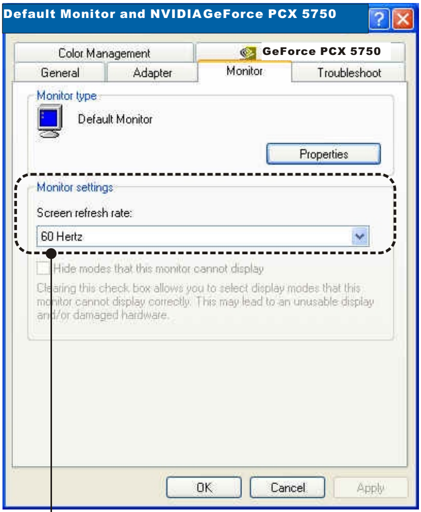
Software Settings

Display Properties- Advanced Settings

Settings　Advanced settings
▶**Monitor**
▶**Model-specific Settings**　**p. 14**



1 Monitor



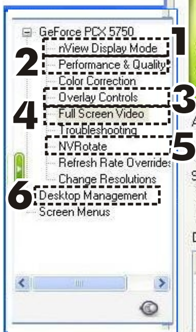
Refresh Rate
We recommend you set the refresh rate to 85 Hz to reduce the flickering of the screen. If 85Hz is unavailable, use the default value.

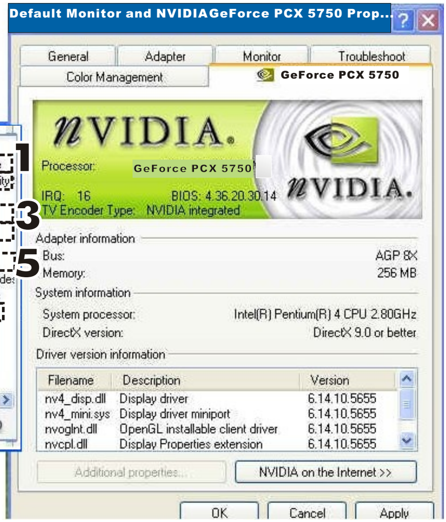
Software Settings

Display Properties- Advanced Settings

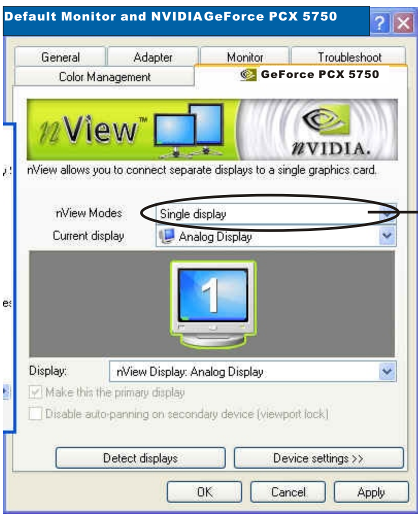
Settings → Advanced settings

- ▶ **Model-specific Settings**
  - ▶ **nView Display Mode**
  - ▶ **Performance and Quality Settings**
  - ▶ **Overlay Controls**
  - ▶ **Full Screen Video**
  - ▶ **Desktop Utilities**
  - ▶ **NVRotate**



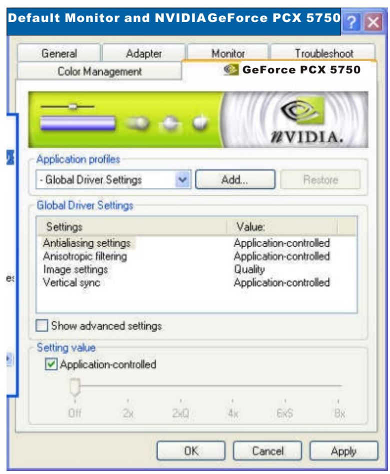


1 nView Display Mode p. 16



Choose nView modes here.

p. 21



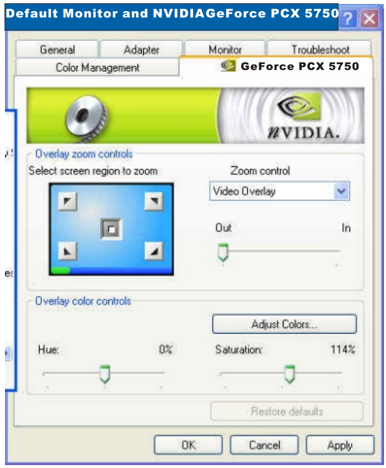
2 Performance and Quality Settings

Includes Direct3D and OpenGL settings.

Display Properties- Advanced Settings

3 Overlay Controls

These controls are used to adjust video quality such as brightness, contrast, hue and saturation.



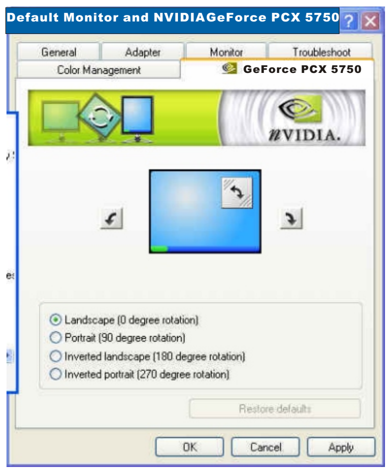
4 Full Screen Video

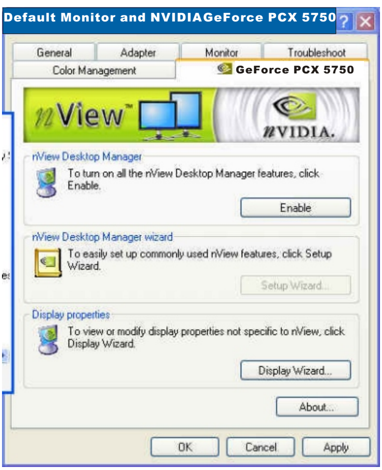
Users can also select the default Full screen device to be as Primary or Secondary Display.



5 NVRotate

p. 23



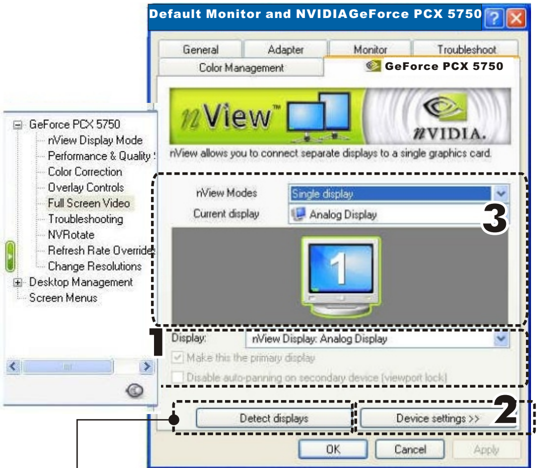


6 Desktop Management

Allow you to set up the Media Center Taskbar Utility and Desktop manager.

Display Properties-Advanced Settings

Settings ▶ Advanced settings
▶ **Model-specific Settings**
▶ **nView Display Mode**
▶ nView Modes
▶ Display
▶ Detect Displays
▶ Device Settings



1 Display

The drop-down list includes all available display output devices on your system (see the figure below).

To set one of the devices as the primary display, select that device from the drop-down list and then check **Make this the primary display**.

You can also disable auto-panning on the secondary device by checking the second check box.



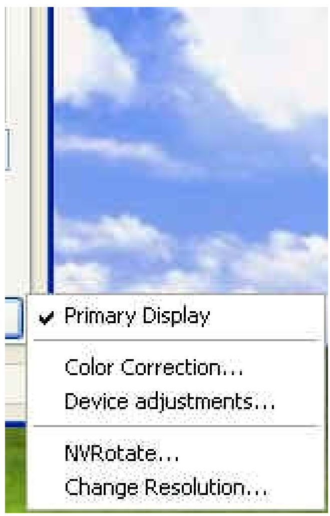
Detect Display

Click this button to have the system detect for any available display devices.

2 Device Settings

Click this button to open a popup menu that includes settings for output devices.

See page 18 for details.



Display Properties-Advanced Settings

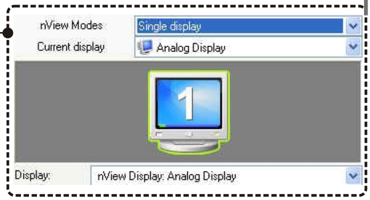
3 nView Modes

The option checked here determines how the video is displayed on the screen(s) using the nView technology.

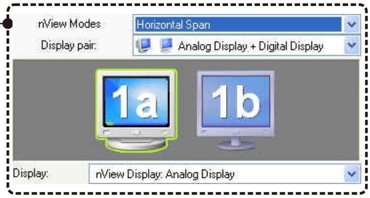
Four modes are available under Windows XP/2000 systems.

*Under Windows ME/98, only **Standard** mode and **Clone** mode are available.*

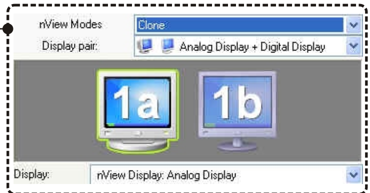
Standard (DualView)
Allows only one screen to display the output video.



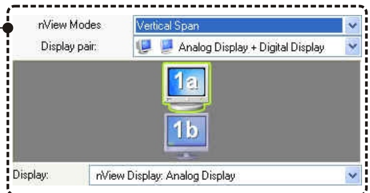
Horizontal Span
Check to have the Windows desktop span horizontally across on two screens.



Clone
Check to have the same images displayed on the two screens.



Vertical Span
Check to have the Windows desktop span vertically across on two screens.

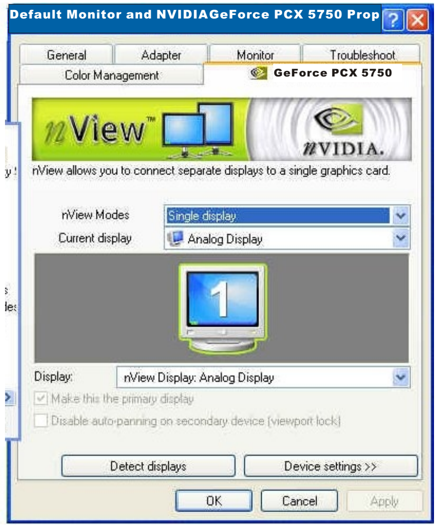


What is nView?

nView is a multi-display technology developed by NVIDIA, which is built into the latest GeForce series video cards. ***nView*** supports a wide variety of multi-display modes, offering users maximum flexibility. It also allows you to set independent resolution, color depth, and refresh rate on a per display basis.

nView is only available for models with dual video output ports.

Settings Advanced settings
▶ **Model-specific Settings**
▶ **nView Display Mode**
▶ **Device Settings *(Standard Mode)***

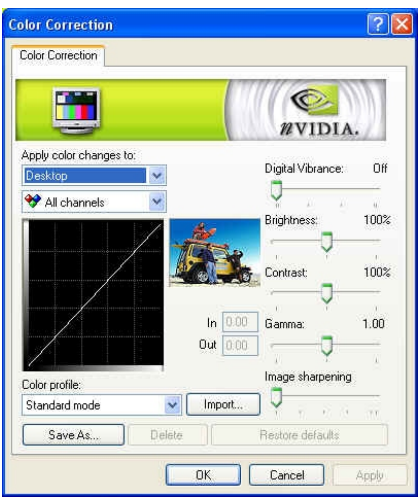


1 Select Output Device

Click this option to select a device from its submenu.

2 Color Correction

This dialogue box allows you to adjust color using slider controls.

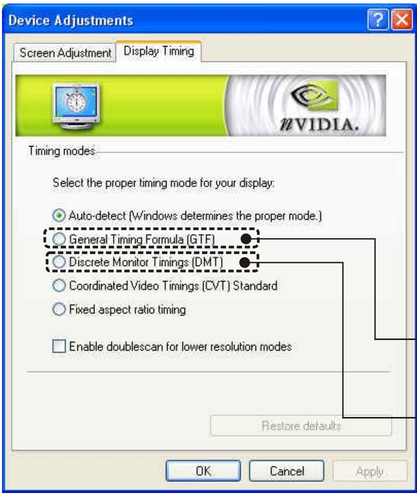


3 Screen Adjustment

Click the arrow icons to adjust the position of the screen on your monitor.

Click **Display Timing** to call up the panel as the figure below.





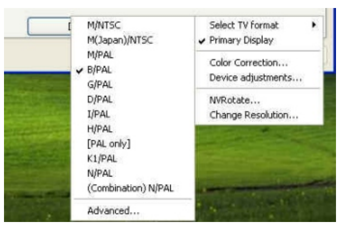
Display Timing

General Timing Formula is a standard used by most newer hardware.

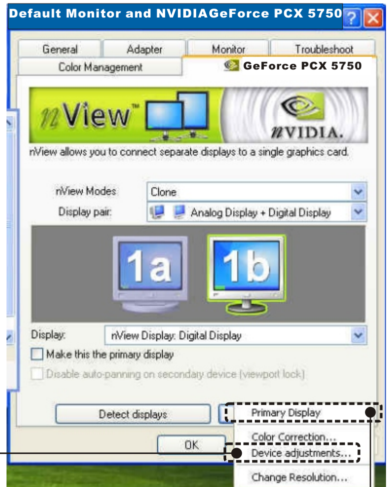
Discrete Monitor Timings (DMT)
DMT is an older standard still in use on some hardware. Check this option if your hardware uses DMT.

Select TV Format

Click this button to bring the **Select TV Format** menu and select a TV standard used in your country from the list. The system will then set the TV format accordingly.



Settings   Advanced settings
- ▶ **Model-specific Settings**
  - ▶ **nView Display Mode**
    - ▶ Device Settings *(Multi-Display Modes)*



Select Output Device

Under multi-display modes, click this option to open the **Device Selection** (see the last page).

Primary Display

Under **multi-display** modes, you can click this option (unavailable in Standard mode) to set the selected device (highlighted in the preview window) as the primary display device.

Software Settings

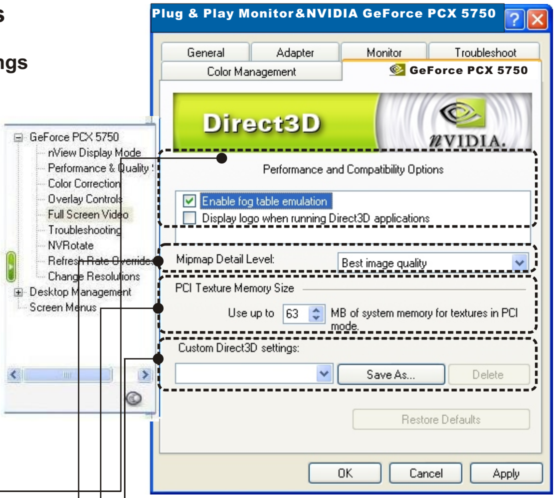
Display Properties-Advanced Settings

Settings Advanced settings

▶Model-specific Settings

▶ Performance and Quality Settings

▶ Direct3D Settings



Direct3D Settings

Allows you to adjust the performance and compatibility options and mipmapping for your Direct3D games.

Performance & Compatibility Options

This field offers options that change the performance and the compatibility of your Direct3D games.

Mipmap detail level

A lower bias provides better image quality; a higher bias increases performances of the applications. You can choose from five preset bias values.

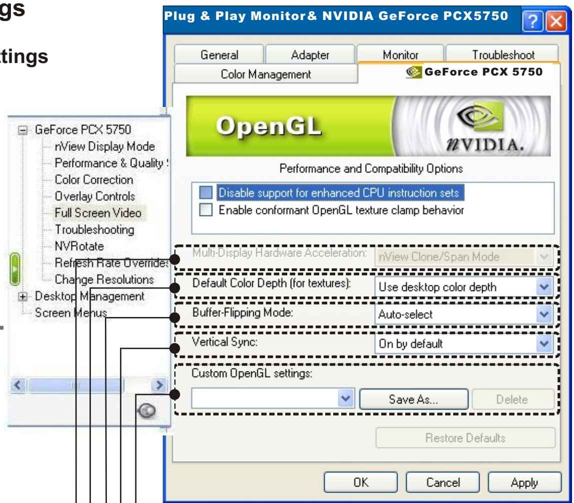
PCI Texture Memory Size

Allows you to specify the maximum size of PCI texture heap. Increasing this value on PCI systems with sufficient memory may greatly improve the performance of some Direct3D applications. For performance reasons, this utility does not allow you to set more than half the available system memory as reported by Windows.

Custom Direct3D settings

Allows you to save the current settings as a custom "tweak". Saved settings will be added to the adjacent list. Once you have found the optimal settings for a particular Direct3D before starting the program and eliminates the need to set each option individually.

Settings ▶ Advanced settings
▶ Model-specific Settings
▶ Performance and Quality Settings
▶ OpenGL settings



OpenGL Settings

Allows you to adjust the performance and compatibility options of your OpenGL application.

Multi-Display Hardware Acceleration

This option determines advanced rendering options when using multiple displays. The options include: *Single-Display Mode*, *nView Clone/Span Mode,* and *Multi-Device Compatiblity Mode*.

Note that Multi-display hardware acceleration options do not apply when using nView Multiview mode in Windows NT 4.0.

Custom OpenGL settings

A list of the custom settings you have saved. Selecting an item from the list will activate the setting. To apply the setting, please choose the "OK" or "Apply" button.

Vertical Sync

Select the type of vertical synchronization.

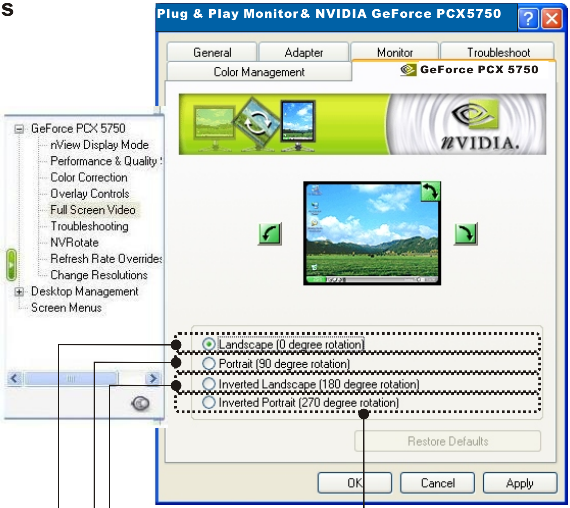
Default color depth for textures

This setting item allows you to select the default Color depth for textures.

Buffer flipping mode

Turns on page flipping for full-screen OpenGL applications which may improve their performance. If this is disabled, OpenGL will use a bit block transfer to flip from the back buffer to the front buffer.

Settings   Advanced settings
▶**Model-specific Settings**
▶**NVRotate**



NVRotate

Controls the display view to suit different viewing directions of the display devices.

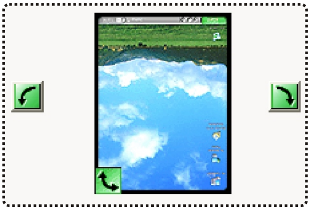
Landscape (0 degree rotation)

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Inverted Portrait (270 degree rotation)

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Portrait (90 degree rotation)

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Inverted Landscape (180 degree rotation)

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